IN THE SPECIFICATION:

Please make the following grammatical corrections, as shown in the full paragraphs set forth below:

In Paragraph 48, delete "from" in line 3.

In Paragraph 65, replace "ta" with "a" in line 7.

In Paragraph 67, insert a space after "(1109)" in line 1.

A1

[48] Gammatone filters have demonstrated effectiveness in hearing and speech perception by humans and have the ability to characterize impulse-response data in the manner suggested by physiological studies of the ~~from~~ primary auditory nerve fibers of the cat, as well as revcor data from auditory filtering studies of cats. In the Biomimetic Sonar, the bandpass and filter shape of the gammatone filters can be dynamically changed, which is advantageous in optimizing an acoustic image. The same power/frequency distribution (801) typically occurs at each passband in a gammatone filter bank.

A2

[65] As shown in FIG. 11, the echoes received from the binaural (or multi-aural) hydrophone array are analyzed both individually and by differential comparison. The preferred signal analysis procedure using a binaural hydrophone array consists of feeding the echoes received by the left and right hydrophones (1101, 1102) into a left cochlear processor and a right cochlear processor (1103, 1104), respectively. Each cochlear processor comprises a gammatone filter bank with adjustable parameters, a means of log transformation, and at least three outputs. After log-transformation of the gammatone filter bank output, ~~ta~~ **a** given cochlear processor feeds the inputs of an envelope processor (1105, 1106), an object recognition processor (1108), and a stereausis processor (1109).

A3

[67] The stereausis processor ~~(1109)is~~ **(1109) is** a simple neural network that combines spectral information from the two cochleae according to the following equation: